

## **Evaluation of Polychlorinated Biphenyls (PCBs), Mercury, and DDT in Rockfish, English sole, Chinook Salmon and Coho Salmon from Puget Sound, Washington**

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Washington State Department of Health (DOH) works to protect and improve the health of people in Washington State, in part by reducing or eliminating exposure to health hazards. Washington Department of Fish and Wildlife (WDF&W) has collected data on Puget Sound fishes for over ten years in an effort to determine long-term trends in contaminant levels. While analyses included many contaminants, only three chemicals were found at levels of potential concern to human health: polychlorinated biphenyls (PCBs), mercury, and DDT. DOH has assessed potential health impacts to humans who eat rockfish, English sole, and salmon from Puget Sound.

Several methods were used to estimate and recommend limits in Puget Sound fishes consumed by people. Considerations included levels of mercury, PCBs, and DDT; probability of excess cancers; likelihood of exposure to compounds with effects similar to those from exposure to dioxins; protection of potential developmental and immune system effects; benefits of fish consumption; and alternative consumption options. In general:

- Contamination of rockfish species in Puget Sound is related to the age of the fish, but age is not always related to length. Thus, DOH consumption guidance for rockfish will be for all species combined without reference to size and will be organized by WDF&W fish management areas.
- Contamination of English sole is related to proximity to contaminated areas. Guidance will be provided for numerous sites in Puget Sound. Consumption guidance for English sole from several non-urban areas will be unrestricted.
- Compared with coho salmon, Chinook salmon have higher concentrations of bioaccumulative chemicals such as PCBs and mercury, likely due to their trophic status and marine distribution. Consumption guidance is being developed for Puget Sound coho and Chinook salmon.